Amendments to the Specification

The paragraph starting at page 9, line 6 and ending at page 10, line 7 has been amended as follows.

Fig. 1 is a schematic diagram showing a flow of ink in an ink jet printing apparatus. Designated 102 is an ink cartridge for accommodating ink therein. Denoted 101 is an air communication port ~~101~~ to communicate an interior of the ink cartridge 102 with an open atmosphere. Reference number 103 represents a recovery valve which is closed during the recovery operation to block a return of ink from a print head to the ink cartridge during the recovery operation. Denoted 104 is a print head formed with a plurality of nozzles 110 to eject ink. A pump 105 delivers ink from the cartridge to the print head. A capping mechanism 106 covers a nozzle face of the print head during the recovery operation. Ink is discharged into this capping mechanism 106 during a preliminary ejection. The capping mechanism 106 also sucks out residual bubbles and viscous ink from the nozzles in the print head. A waste ink tank 107 accommodates waste ink that was collected in the capping mechanism 106. An ink path 108 provides a passage in which ink is delivered from the ink cartridge 102 to the print head 104 or vice versa. A filter 109 removes foreign ~~matters~~ matter from the ink supplied from the ink cartridge and also returns the filtered ink to the ink cartridge 102. An ink supply path 112 provides a passage in which ink that was delivered from the ink cartridge 102 is further supplied

through the filter 109 to the nozzles 110. A cleaning blade 111 wipes clean the nozzle face of the print head 104.

The paragraph starting at page 12, line 25 and ending at page 13, line 10 has been amended as follows.

When a pulse voltage is applied to a heater 208 (see Fig. 3A), ink near the heater 208 instantaneously boils to generate a bubble 302 (Fig. 3B). As the bubble inflates, the ink in a space from the ejection port to the heater is expelled ~~(Fig. 3C)~~ (Fig. 3C). This is how the ink is ejected. Immediately after the ink has been ejected, the bubble collapses. However, when the bubble inflates, a part of the bubble separates and moves past the valve and remains in the ink. Then, when new ink is filled into an empty space ranging from the ink path to the ejection port, the residual bubbles remain in the common liquid chamber 210 because of an ink flow (Fig. 3D).

The paragraph starting at page 21, line 8 and ending at line 12 has been amended as follows.

The operation of the CPU 1010 is executed according to a program stored in a program ROM 1012. The program ROM 1012 stores a program, a reference table and ~~others~~ other information. The control flow and the program will be explained later.

The paragraph starting at page 21, line 19 and ending at line 25 has been amended as follows.

The print head control circuit 1023 reads bit-mapped print data for each color at high speed from the image memory 1013 through a bus arbitration circuit (not shown) and transfers the print data to, for instance, six line print heads 1024K-1024Y through independent print data transfer lines and data clock lines.

The paragraph starting at page 25, line 12 and ending at line 20 has been amended as follows.

After the recovery operation is finished, the program returns to step 1204 where it clears the values of the accumulated print dot counters before proceeding to print the next page. If, on the other hand, none of the weighted, accumulated print dot numbers for the nozzle blocks ~~does not~~ exceed the threshold Q, the program returns to step 1205 where it resumes the printing operation until all the print data received is printed out (step 1210).

The paragraphs starting at page 28, line 5 and ending at page 29, line 3 have been amended as follows.

Next, the CPU reads an output of a temperature sensor 1030 (see Fig. 10B) through an AD converter (ADC) 1031 and determines an in-apparatus temperature using a temperature conversion table (not shown) (step 1405).

Then, the CPU starts printing (step 1406) and, when one page of printing is finished (step 1407), it reads out the accumulated print dot counter value for each block (step 1408). The accumulated print dot number for each block is multiplied by the weighting value selected from the table of Fig. 13 which corresponds to the in-apparatus temperature obtained in step 1045 (step 1409). Then a check is made to see if there is any block whose multiplied result is in excess of a predetermined threshold Q (step 1410). If such a block exists, the CPU decides that there is a high possibility of an ejection failure being caused by residual bubbles and returns to step 1403 where it executes the recovery operation. After the recovery operation is finished, the CPU returns to step 1404 where it starts the printing operation again. If, on the other hand, none of the weighted, accumulated print dot numbers ~~does not~~ exceed the threshold, the CPU returns to step 1406 where it resumes the printing operation. The above process is continued until all the print data received is printed out (step 1411).